UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/963,807	09/26/2001	Roger Lee Buis	BLD920010012US1 (0525)	1170

62626 7590 03/29/2007

DAVID W. LYNCH
CHAMBLISS, BAHNER & STOPHEL
1000 TALLAN BUILDING-T
TWO UNION SQUARE
CHATTANOOGA, TN 37402

EXAMINER	
QIN, YIXING	
ART UNIT	**PAPER NUMBER**
2625	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/29/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/963,807	BUIS ET AL.	
	Examiner	Art Unit	
	Yixing Qin	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 December 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *53-63* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *53-63* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

In response to applicant's amendment received 12/28/2006, all requested changes have been entered.

Response to Arguments

Applicant's arguments filed 12/28/2006 have been fully considered but they are not persuasive. The argument is that there is no concatenation of XML start tags for forming a qualified tag in the formatting template. The previously cited XSL Example does not use a concatenation of start tags. However, upon further searching, a new reference, "Employees", discloses XML and XSL code that performs formatting of a XML using an XSL file that uses concatenation of start tags. Employees was gathered from the website http://www.topxml.com/xsltStylesheets/xslt_data_formatting.asp under the StringFuncs heading as an example of using concatenated start tags in the XSL file to display in a table information regarding various employees. The XML and XSL files of the "Employees" example have been included along with this Office Action. Additionally, a screenshot of the contents of the zip file containing all other relevant files of the "Employees" example is enclosed to show that the last modified date of the files was 6/18/01 or earlier. This zip file can be obtained from the website mentioned above.

The previous 112 rejection has been withdrawn because claim 40 was canceled.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 53-55 are rejected under 35 U.S.C. 101.

Claims 53-55 are directed towards a formatting template for formatting XML content. This is only a manipulation of data structures and falls within one of the 35 U.S.C. 101 judicial exceptions – law of nature, natural phenomenon or abstract idea. In this case, the formatting template is basically a program that manipulates data and would constitute as an abstract idea. Since the claim is directed towards an abstract idea, the Examiner suggests amending the claims to be part of a method or apparatus claim (such as the other independent claims 56, 60, 62) that uses the formatting template to manipulate data and to produce a tangible result (in this case, printing the formatted document).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

I. Claims 53-59, 61 and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brooke et al (U.S. Patent No. 6,763,343) in view of Employees.

Regarding claims 53 and 56, Brooke et al discloses in column 3, lines 17-20 and column 6, lines 10-31 a description of how XSL is a formatting template for an XML file.

It does not explicitly disclose Brooke does not disclose any XSL code and thus does not disclose the various tags as claimed.

However, Employees discloses a formatting template for printing an XML document (EmployeeStringFuncs.xsl is a formatting template for an XML file), comprising an XML Descriptor (XMD) associated with an XML data element of the XML document, wherein the XMD is identified by an associated qualified tag having a concatenation of a plurality of XML start tags representing start tags hierarchically traversed in the XML document to reach the XML data element (The code line <xsl:for-each select="**/employees/employee**"> shows the qualified tag of employees and the individual employee is what is being searched and matched to apply a formatting to that particular XML element), the XMD providing formatting to content associated with the XML data element. (Since this example shows an XSL stylesheet, the goal of the stylesheet is to format XML data for displaying or printing. As mentioned above, the searching for matches and formatting is considered to be one step) One can see from the XML file, Employee.xml, the tags employees and employee.

Brooke and Employees are in the art of formatting an XML document.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have to combined the two references because the XSL example provides more information on how to format XML documents.

The motivation would have been to enable a user to write code for formatting XSL documents.

Therefore, it would have been obvious to combine Brooke and Employees to obtain the invention as specified.

Regarding claim 56, the XSL stylesheet processor of Brooke (column 6 lines 38-47) acts as a PSF because it facilitates the formatting of an XML file using XSL. Column 2, lines 59-67 disclose the printing of traditional SGML based applications documents for customers. Although a spooler is not disclosed, it is well-known in the printing art to have a spooler for printing.

Regarding claim 54 and 57, Brooke et al discloses in column 3, lines 17-20 and column 6, lines 10-31 a description of how XSL is a formatting template for an XML file.

It does not explicitly disclose "wherein the data map comprises a chain of XML descriptors for formatting attributes if XML elements."

However, Employees shows that the <> act as delimiters to separate the various XML descriptors.

Brooke and Employees are in the art of formatting an XML document.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have to combined the two references because the Employees provides more information on how to format XML documents.

The motivation would have been to enable a user to write code for formatting XSL documents.

Therefore, it would have been obvious to combine Brooke and Employees to obtain the invention as specified.

Regarding claim 55, 58, 61 and 63, Brooke et al discloses in column 3, lines 17-20 and column 6, lines 10-31 a description of how XSL is a formatting template for an XML file.

It does not explicitly disclose "wherein an XML descriptor that does not have a matching qualified tag is skipped and a next XML descriptor matching a start tag is used in formatting the XML data."

However, Employees shows each template match has a value associated with it. It is an inherent aspect of the programming language, however, to skip values that are not matched and continue on to the next value and/or give an error message in the process.

Brooke and Employees are in the art of formatting an XML document.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have to combined the two references because the Employees provides more information on how to format XML documents.

The motivation would have been to enable a user to write code for formatting XSL documents.

Therefore, it would have been obvious to combine Brooke and Employees to obtain the invention as specified.

Regarding claim 59, Brooke et al discloses in column 3, lines 17-20 and column 6, lines 10-31 a description of how XSL is a formatting template for an XML file.

It does not explicitly disclose, "the formatting template of claim 56 further comprising a buffer for storing start tags in order as the XML file is parsed."

However, Brooke's system contains various memories and caches (Fig. 1A) and would be obvious to use any of those memories to act as a buffer for processing data.

Brooke and Employees are in the art of formatting an XML document.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have to combined the two references because the XSL example provides more information on how to format XML documents.

The motivation would have been to enable a user to write code for formatting XSL documents.

Therefore, it would have been obvious to combine Brooke and Employees to obtain the invention as specified.

II. Claims 53-59, and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brooke et al (U.S. Patent No. 6,763,343) in view of Employees and further in view of Official Notice.

Regarding claims 60 and 62 Brooke discloses a method for printing XML documents directly using a formatting template, comprising:

parsing the XML document to identify start tags hierarchically traversed in the XML document to reach an XML data element; (column 6 lines 38-47 – the XSL stylesheet processor of Brooke acts as a PSF because it facilitates the formatting of an XML file using XSL)

It does not explicitly disclose the 2nd-4th limitations regarding the searching, formatting and merging.

However, the Employees reference discloses "searching a data map comprising XML descriptors identified by an associated qualified tag having a concatenation of a plurality of XML start tags until a qualified tag associated with an XML descriptor matches the identified start tags hierarchically traversed in the XML document to reach the XML data element;" (the point of the EmployeeStringFuncs.xsl file is to search through the Employees.xml file for finding elements that matched – in this case, it traversed the Employees.xml file for employee names.)

formatting the XML data element according the XML descriptor associated with the qualified tag having a concatenation of a plurality of XML start tags matching the identified start tags hierarchically traversed in the XML document to reach the XML data element; (the EmployeeStringFuncsOutput.html file discloses that various information about the employees is formatted into a table)

merging the XML element associated with the XML descriptor associated with the qualified tag having a concatenation of a plurality of XML start tags matching the identified start tags hierarchically traversed in the XML document to reach the XML data element to produce a formatted print data stream; (the EmployeeStringFuncs.xsl has a loop to traverse the XML document to identify the appropriate element to produce the values in the table. While this not explicitly a print stream, the presented data in the html can be easily printed.)

The Examiner also takes Official Notice on the first and last limitations. "placing an XML document to be printed on a server spool; and printing a document using the produced formatted print data stream." Are well-known in the printing art, and would have been obvious to one of ordinary skill as to how to implement a spooler and a printer into the Brooke invention.

Brooke and Employees are in the art of formatting an XML document.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have to combined the two references because the XSL example provides more information on how to format XML documents.

The motivation would have been to enable a user to write code for formatting XSL documents.

Therefore, it would have been obvious to combine Brooke and Employees to obtain the invention as specified.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yixing Qin whose telephone number is (571)272-7381. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler Lamb can be reached on (571)272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

YQ

KING Y. POON
PRIMARY EXAMINER